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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/730,441	12/08/2003	John Stewart	TH-2491 (US)	2239

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EXAMINER	
WONG, ALBERT KANG	
ART UNIT	**PAPER NUMBER**
2612	

DATE MAILED: 09/25/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/730,441	STEWART ET AL.	
	Examiner	Art Unit	
	Albert K. Wong	2612	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *14 September 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-27* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-5,11-18 and 20-27* is/are rejected.

7)☒ Claim(s) *6-10 and 19* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *08 December 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

1. This Office action is in response to the letter filed September 14, 2006. Claims 1-27 are pending. Applicant has presented two arguments in support of the patentability of the claims. Neither argument is considered persuasive.

The first argument states that the provisional application was never published and thus does not fulfill the requirements under 35 U.S.C. 102(e). PG Pub. 2004/0246141 claims the benefit of the provisional application (60/475,441). It is considered published because the application is made available to the public when the PG Pub is published. See subsection (v) of Chapter 103 of the Manual of Patent Examination Procedures (MPEP) below:

> **37 CFR 1.14 Patent applications preserved in confidence.**
>
> (a) *Confidentiality of patent application information.* Patent applications that have not been published under 35 U.S.C. **122(b)** are generally preserved in confidence pursuant to 35 U.S.C. **122(a)**. Information concerning the filing, pendency, or subject matter of an application for patent, including status information, and access to the application, will only be given to the public as set forth in § **1.11** or in this section.
> (1) Records associated with patent applications (see paragraph (g) for international applications) may be available in the following situations:
> (i) *Patented applications and statutory invention registrations.* The file of an application that has issued as a patent or published as a statutory invention registration is available to the public as set forth in § **1.11(a)**. A copy of the patent application-as-filed, the file contents of the application, or a specific document in the file of such an application may be provided upon request and payment of the appropriate fee set forth in § **1.19(b)**.
> (ii) *Published abandoned applications.* The file of an abandoned application that has been published as a patent application publication is available to the public as set forth in § **1.11(a)**. A copy of the application-as-filed, the file contents of the published application, or a specific document in the file of the published application may be provided to any person upon request, and payment of the appropriate fee set forth in § **1.19(b)**.
> (iii) *Published pending applications.* A copy of the application-as-filed, the file contents of the application, or a specific document in the file of a pending application that has been published as a patent application publication may be provided to any person upon request, and payment of the appropriate fee set forth in § **1.19(b)**. If a redacted copy of the application was used for the patent application publication, the copy of the specification, drawings, and papers may be limited to a redacted copy. The Office will not provide access to the paper file of a pending application that has been published, except as provided in paragraph (c) or (h) of this section.
> (iv) *Unpublished abandoned applications (including provisional applications) that are identified or relied upon.* The file contents of an unpublished, abandoned application may be made available to the public if the application is identified in a U.S. patent, a statutory invention registration, a U.S. patent application publication, or an international patent application publication of an international application that was published in accordance with PCT Article **21(2)**. An application is considered to have been identified in a document, such as a patent, when the application number or serial number and filing

date, first named inventor, title and filing date or other application specific information are provided in the text of the patent, but not when the same identification is made in a paper in the file contents of the patent and is not included in the printed patent. Also, the file contents may be made available to the public, upon a written request, if benefit of the abandoned application is claimed under 35 U.S.C. **119(e)**, **120**, **121**, or **365** in an application that has issued as a U.S. patent, or has published as a statutory invention registration, a U.S. patent application publication, or an international patent application that was published in accordance with PCT Article **21(2)**. A copy of the application-as-filed, the file contents of the application, or a specific document in the file of the application may be provided to any person upon written request, and payment of the appropriate fee (§ **1.19(b)**).

(v) *Unpublished pending applications (including provisional applications) whose benefit is claimed.* A copy of the file contents of an unpublished pending application may be provided to any person, upon written request and payment of the appropriate fee (§ 1.19(b)), if the benefit of the application is claimed under 35 U.S.C. 119(e), 120, 121, or 365 in an application that has issued as a U.S. patent, an application that has published as a statutory invention registration, a U.S. patent application publication, or an international patent application publication that was published in accordance with PCT Article 21(2). A copy of the application-as-filed, or a specific document in the file of the pending application may also be provided to any person upon written request, and payment of the appropriate fee (§ 1.19(b)). The Office will not provide access to the paper file of a pending application, except as provided in paragraph (c) or (h) of this section.

(vi) *Unpublished pending applications (including provisional applications) that are incorporated by reference or otherwise identified.* A copy of the application as originally filed of an unpublished pending application may be provided to any person, upon written request and payment of the appropriate fee (§ **1.19(b)**), if the application is incorporated by reference or otherwise identified in a U.S. patent, a statutory invention registration, a U.S. patent application publication, or an international patent application publication that was published in accordance with PCT Article **21(2)**. The Office will not provide access to the paper file of a pending application, except as provided in paragraph (c) or (h) of this section.

(vii) *When a petition for access or a power to inspect is required.* Applications that were not published or patented, that are not the subject of a benefit claim under 35 U.S.C. **119(e)**, **120**, **121**, or **365** in an application that has issued as a U.S. patent, an application that has published as a statutory invention registration, a U.S. patent application publication, or an international patent application publication that was published in accordance with PCT Article **21(2)**, or are not identified in a U.S. patent, a statutory invention registration, a U.S. patent application publication, or an international patent application that was published in accordance with PCT Article **21(2)**, are not available to the public. If an application is identified in the file contents of another application, but not the published patent application or patent itself, a granted petition for access (see paragraph (h)) or a power to inspect (see paragraph (c)) is necessary to obtain the application, or a copy of the application.

The second argument states that the provisional application does not fulfill the requirements of 35 U.S.C. 102 (e) because both the provisional and the instant application have the same inventive identity. This is an incorrect interpretation of the statue. The inventive

identity of the provisional application is Paolo Tubel. The inventive identity of the instant application is Tubel et al. Under section 102(e) all inventors must be the same to constitute the same inventive entity. See statue below (also shown in MPEP under Chapter 706.02(f)):

> **35 U.S.C. 102(e)**, in part, allows for certain prior art (i.e., U.S. patents, U.S. patent application publications and WIPO publications of international applications) to be applied against the claims as of its effective U.S. filing date. This provision of **35 U.S.C. 102** is mostly utilized when the publication or issue date is too recent for the reference to be applied under **35 U.S.C. 102**(a) or (b). In order to apply a reference under **35 U.S.C. 102**(e), the inventive entity of the application must be different than that of the reference. Note that, where there are joint inventors, only one inventor *>needs to< be different for the inventive entities to be different and a rejection under **35 U.S.C. 102**(e) is applicable even if there are some inventors in common between the application and the reference.

Therefore, applicant's arguments are not persuasive. It has been determined, however, that the provisional application is not prior art because the publication date is the same as the PG Pub date (December 9, 2004) and thus, does not antedate the effective filing date of the instant application. Under 35 U.S.C. 102(e) a provisional application is not considered an application for patent and thus, not entitled to prior art status as of its filing date.

The PG Pub, however, is considered an application for patent and is entitled to the effective filing date of any prior application to which benefit is claimed if the subject matter is found in both the provisional and the application.

A review of both applications shows that the subject matter claimed in the instant application is supported in both the PG Pub as well as the provisional application—even though the references appear to be different. Therefore, the prior rejections have been

modified. The claims are rejected under 35 U.S.C. 102(e) and 103 in view of the PG Pub, but the support for the rejections use the provisional application. The substance of the rejection has therefore not been changed. Since it is clear in the PG Pub that the same claimed subject matter is disclosed, no discussion regarding the PG Pub will be presented.

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1, 17, and 20-22 are rejected under 35 U.S.C. 102(e) as being anticipated by US2004/0246141 (Tubel et al).

Regarding claim 1, the description of the downhole gauge in the provisional application discloses a piezoelectric assembly that is equivalent to the claimed acoustic wave generator; the claimed coupled mechanism is described as slips that expand to touch the tubing for engagement with the inner surface of a pipe; and the claimed signal controller is inherent in the disclosure since there must be some means to drive the acoustic wave generator.

Regarding claim 17, the gauge has been discussed above and the pipe is disclosed in Tubel. Tubel discloses a sensor package to gather data and to communicate the data with the acoustic gauge. The sensor package is considered a SCADA box.

Regarding claim 20, Tubel discloses the use of a downhole gauge within a pipe that has slips to couple to the tubing. Inherent in the use would be the steps of running the gauge into the pipe and setting the gauge in the pipe to enable communication.

Regarding claims 21-22, Tubel discloses the use of slips that couple to the pipe to establish an acoustic transmission path via coupling of the acoustic generator.

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 2-5, 11-16, 18, and 23-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over US2004/0246141 (Tubel et al).

Regarding claims 2-3, Tubel discloses a piezoelectric assembly but not a crystal or a wafer. It is well known in the art that crystals and wafers are conventional acoustic wave generators. It would have been obvious to use such means as suggested by Tubel.

Regarding claim 4, it is well known in the art that magneto-restrictive materials functions in a way similar to piezoelectric materials (the application of a signal causes a mechanical change that induces a vibration in a contact material). It would have been obvious to use a magneto-restrictive material since it is known to be functionally similar to a piezo material.

Regarding claim 5, Tubel discloses the use of a slip to couple with the production tubing. Tubel does not disclose a wedge with a tapered surface for engagement with the pipe. It would have been obvious to use a wedge or to contour the surface of the slip to engage the pipe surface to ensure good coupling of the signal or mechanical coupling of the gauge with the pipe.

Regarding claim 11, the gauge in Tubel is disclosed to include data acquisition, and data and control communications transmission by utilizing a microprocessor. Thus, the processor is taught. The acoustic generator drive is inherent since there must be some means to drive the acoustic generator. It is conventional to include an ADC in data acquisition systems since measured parameters are in analog form. It would have been obvious to include an ADC for its well-known function.

Regarding claim 12, Tubel discloses that the purpose of the gauge is to measure downhole conditions with sensors. It would have been obvious to include a sensor in communication with the signal controller so that the measured values may be communicated to the surface.

Regarding claim 13, one of the measurements contemplated by Tubel is formation pressure monitoring.

Regarding claim 14, it would have been obvious to use the recited sensors since they are typically used to measure parameter as disclosed in Tubel.

Regarding claims 15-16, Tubel discloses that the purpose of the system is to optimize hydrocarbon production. This would include tools such as valves and pumps. It would have been obvious for a tool to be controlled by the signal controller to control production since the signal controller measures parameter pertaining to optimization of production.

Regarding claim 18, this limitation has been addressed above.

Regarding claims 23-27, the steps would have been obvious since they comprise the steps of using the apparatus in its intended manner. The apparatus have been shown to be obvious.

6. Claims 6-10, and 19 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Albert K. Wong whose telephone number is 571-272-3057. The examiner can normally be reached on M-Th.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wendy Garber can be reached on 571-272-7308. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Albert K. Wong
September 18, 2006

ALBERT K. WONG
PRIMARY EXAMINER